



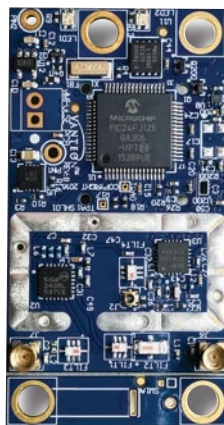
+ vIMPULSE[™]

Micropower Long Range Wireless Transceiver



The Vanteon vImpulse[™] radio is a software configurable radio transceiver module designed for long range data communications with very low power consumption for battery operated devices.

The small form factor and low power allow the module to be utilized in applications that require remote control and sensor data acquisition in industrial environments where frequent battery changes are inconvenient and costly. Applications include: low power wireless sensor network systems, SCADA, meter reading, oil and gas monitoring and control. The use of 900 MHz unlicensed spectrum allows the device to be easily installed in an existing enclosure and deployed in a wide variety of systems.



Actual Size

Specifications

- Frequency Band: 902 MHz to 928 MHz
- Output Transmit Power: 1 Watt
- Receive Sensitivity: Waveform dependent, 2 dB noise figure
- Modulation Formats: FSK, GFSK, MSK, GMSK, OOK
- Sleep current: approx. 2 μ Amps
- Data Rate: Capable of up to 1 Mbps
- Dimensions: 1.90 inches long, 1.16 inches wide, 0.45 inches high
- Host interface: SPI, UART, GPIO
- Interference Avoidance: Frequency Hopping Spread Spectrum
- Multipath Mitigation: Spatial diversity using dual antennas
- Antenna connections: MMCX RF connectors
- Power control: Wide range of output power from -20 dBm to +30 dBm
- User Interface: 6 LED indicators (two triple color: red, green, blue)
- Data storage: On board 16 Mb serial flash
- Analog Inputs: Multiple (multifunction) 12 bit @ 200 Ksps or 10 bit @ 500 Ksps

Other Features

- Power Amp bypass with +20 dBm output for power savings in transmit
- Multiple levels of sleep/wake for power savings
- Fast wake up by host
- Real time clock
- Auxiliary serial I/O (UART, I2C, SPI)

Accelerate Your Design

Let Vanteon's engineering team help you get your products to market faster with a proven scalable radio design.

Call us at 888.506.5677



Celebrating over 30 years of service, innovation, and collaboration.